DOCUMENT RESUME

ED 229 907 EC 151 904

AUTHOR Tinsley, Thomas E., Jr.
TITLE What a Special Education Management System Should Look Like--A Consumers Guide. A Fully Computerized Special Education Management System Overview.
PUB DATE Mar 83
NOTE 24p.; Paper presented at the Council for Exceptional Children's National Conference on the Use of Microcomputers in Special Education (Hartford, CT, March 10-12, 1983).
PUB TYPE Guides - Non-Classroom Use (055) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Computer Managed Instruction; *Disabilities; Elementary Secondary Education; *Management Information Systems; Special Education

ABSTRACT

The presentation focuses on development and criteria for selecting a database management system in the schools, with particular application to special education. An introductory section describes general applications for education in three basic categories: word processing, electronic spread sheet, and database management systems. An integrated database management system (IDMS) in special education would include nine modules: demograhics; procedural safeguards; test data; observations and assessment; individualized educational program management; data sort; report writing; word processing; and calculation. An example of a report generated from an IDMS is presented. Suggestions for selecting a system are given, including comparing systems for particular needs in terms of program considerations, ease in use and flexibility, documentation, evaluation, support maintenance/agreement, training, and hardware requirements. (CL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED229907

SHELTON PUBLIC SCHOOLS
SHELTON, CONNECTICUT

CEC CONFERENCE

Thomas E. Tinsley Jr.

Copyright © March, 1983

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

WHAT A SPECIAL EDUCATION MANAGEMENT SYSTEM SHOULD LOOK LIKE--A CONSUMERS GUIDE

A FULLY COMPUTERIZED SPECIAL EDUCATION MANAGEMENT SYSTEM OVERVIEW

EC151904

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Thomas E. Tinsley, Jr.

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CEC CONFERENCE
Thomas E. Tinsley Jr.
Copyright © March, 1983

A COMPUTERIZED MANAGEMENT INFORMATION SYSTEM

"A CONSUMER'S GUIDE"

A COMPUTERIZED MANAGEMENT
INFORMATION SYSTEM.....

A CONSUMERS GUIDE!!!

CONTENT OBJECTIVES

I. DESCRIBE COMPUTER GENERAL ADMINISTRATION APPLICATIONS!

II. DEFINE DATA BASE!

III. DESCRIBE HOW A DATA BASE WORKS!

IV. DISTINGUISH BETWEEN GENERAL DBMS AND INTEGRATED DBMS!

V. DEFINE YOUR NEEDS AND MAKE YOUR CHOICE!

"WHAT TO LOOK FOR"

Copyright © March, 1983

GENERAL APPLICATIONS
fall in 3 basic categories:

WORD PROCESSING

ELECTRONIC SPREADSHEET

DATA BASE MANGEMENT
SYSTEMS

CEC CONFERENCE
Thomas E. Tinsley Jr.
Copyright © March, 1983

DATA BASE MANAGEMENT SYSTEMS

THERE ARE TWO TYPES OF DATA BASE MANAGEMENT SYSTEMS. THE FIRST TYPE IS A SIMPLE OR GENERAL ELECTRONIC FILING SYSTEM. THEY CAN BE USED AS SUBSTITUTES FOR ALL THOSE APPLICATIONS THAT INVOLVE MAINTAINING RECORDS AND FILES, AND GENERATING REPORTS FROM THOSE FILES.

IT IS IMPORTANT TO NOTE THAT IT DOESN'T MATTER WHETHER THE RECORDS RELATE TO STUDENTS, PERSONNEL, INVENTORY ITEMS OR PURCHASE ORDERS. YOU WILL DESIGNATE THE FILE WHEN YOU ENTER YOUR CHOICE OF DATA...I.E. "INVENTORY".

THE NUMBER OF POTENTIAL APPLICATIONS IS MIND BOGGLING. FOR EXAMPLE, A TYPICAL ELEMENTARY SCHOOL CAN ESTABLISH A STUDENT DEMOGRAPHIC DATA BASE ON DISKETTE AND HAVE INSTANT ACCESS TO ANY PORTION OF THE FILE, I.E.: A BUS BREAKS DOWN AND THE KINDERGARTEN STUDENTS ARE STRANDED AT SCHOOL: LIST/PRINT ALL KINDERGARTEN STUDENTS ON BUS RUN #15: PRIORITY 1. HOME PHONE; 2. EMERGENCY PHONE; 3. PARENTS NAME, ETC.

YOU SET UP A PHONE SYSTEM AND CALL HOME. UNLESS YOU HAD A FILING SYSTEM TO ACCOMODATE A PROBLEM OF THIS TYPE IT WOULD HAVE BEEN AN IMPOSSIBLE TASK.

Copyright © March, 1983

ELECTRONIC SPREAD SHEETS

BUSINESS EXECUTIVES HAVE DISCOVERED THAT THE TIME SAVING (AND POWER) ADVANTAGES OF THIS ONE TYPE OF PROGRAM JUSTIFIES THE COST OF PURCHASING A "MICRO" ALL BY ITSELF.

THESE PROGRAMS HANDLE JOBS THAT INVOLVE A TWO DIMENSIONAL (ROWS AND COLUMNS) TABLES FILLED WITH NUMBERS THAT NEED EXTENSIVE PROCESSING AND REPETITIOUS CALCULATIONS. THE VALUE OF THE PROGRAM IS THAT YOU CAN CHANGE A SINGLE VARIABLE AND ALL THE RELATED VALUES WILL AUTOMATICALLY CHANGE WITH IT. THE POWER OF THE PROGRAM RESTS WITH ITS POTENTIAL FOR FORECASTING, MAPPING AND NEGOTIATIONS. THE PROGRAM BASIS IS THE "WHAT...IF" AND "IF...THEN" TASKS THAT IT CAN PERFORM.

THERE ARE NUMEROUS CENTRAL OFFICE TASKS THAT CAN BE ACCOMPLISHED WITH THE ELECTRONIC SPREAD SHEET. THIS IS TRULY A TIME SAVER.

WORD PROCESSING

A WORD PROCESSING PROGRAM IS NOT SIMPLY A SOPHISTICATED TYPEWRITER! IT IS MORE APTLY DEFINED AS A TOOL THAT CAN TURN A LABORIOUS, TIME CONSUMING WRITING TASK INTO ONE THAT IS ALMOST ENJOYABLE.

IF YOU WRITE LIKE I DO, IT TAKES A MINIMUM OF THREE DRAFTS BEFORE I PRODUCE A FINAL COPY. THIS MEANS THAT THE TYPIST MUST RETYPE THE COPY A NUMBER OF TIMES WHILE TRYING TO DECIPHER MY HIEROGLYPHICS, SUCH AS SCRATCH OUTS, WRITE OVERS AND ARROWS.

THIS IS WHERE A "WORD PROCESSING" PROGRAM "SHINES". WORDS, SENTENCES OR PARAGRAPHS CAN BE CHANGED, DELETED, SUBSTITUTED OR REARRANGED IN A MATTER OF SECONDS... ELECTRONICALLY.

WORD PROCESSING IS MOST USEFUL FOR WRITING TASKS, SUCH AS REPORTS, CURRICULUM GUIDES, DEPARTMENTAL PROCEDURES OR POLICIES, THAT FREQUENTLY REQUIRE EXTENSIVE CHANGES DURING THE CREATION OF THE ORIGINAL DRAFT OR AFTER THE DRAFT HAS BEEN PRODUCED.

IN ADDITION, WORD PROCESSING IS ALSO USEFUL FOR CUSTOMIZING STANDARD DOCUMENTS SUCH AS CONTRACTS, LETTERS TO PARENTS, ETC., WHERE A SMALL PORTION OF THE OVERALL TEXT NEEDS CHANGING.

SOME WORD PROCESSING PROGRAMS CAN BE LINKED TO DATA BASES OR MAILING PROGRAMS WHICH MAKE SOME INSERTION, SUCH AS NAME AND ADDRESS, AUTOMATICALLY. CERTAIN WORD PROCESSING PROGRAMS ARE ACCOMPANIED BY DICTIONARY FILES THAT AUTOMATICALLY CHECKS FOR SPELLING ERRORS.

Copyright © March, 1983

ADMINISTRATIVE DATA BASE AND MANAGEMENT SYSTEMS

ATTENDANCE
STUDENT - RECORD FILES
CALENDAR OF EVENTS
COST ACCOUNTING
INVENTORY
LIBRARY/MEDIA CENTER
MAINTENANCE
SCHEDULING
BUS/TRANSPORTATION
CLUB/SOCIAL ACTIVITIES
GRADE REPORTING
LEDGER
MAILING LISTS
PAYROLL
SPORTS ACCOUNTING
WORD PROCESSING
STAFF DATA BASE
IEP GENERATOR
CURRICULUM/COURSE OBJECTIVES

SOME OF THESE APPLICATIONS STAND ALONE;
SOME ARE INTEGRATED DATA BASES.

CEC Conference
Thomas E. Tinsley Jr.
Copyright © March, 1983

A FEW PROBLEMS INHERENT IN THE USE OF GENERAL DATA BASE APPLICATIONS

1. FOR MOST APPLICATIONS YOU WILL NEED A SEPARATE DATA BASE, I.E....PERSONNEL AND STUDENT...DBMS.
2. YOU NEED TO ENTER THE SAME DATA INTO EACH SEPARATE DBMS, I.E....STUDENT DEMOGRAPHIC FILE AND STUDENT ATTENDANCE FILE. THIS ALSO CREATES A PROBLEM OF MAINTAINING OR UPDATING MULTIPLE FILES.

A FEW SOLUTIONS TO THE PROBLEMS

1. KEEP A DETAILED "CATALOG" OF DBMS AND WHAT IS KEPT ON EACH SYSTEM. A MENU IS MORE COMPLEX BUT IS MORE EFFICIENT.
2. CONSTRUCT A SET OF INSTRUCTIONS FOR PERSONNEL MAINTAINING SYSTEMS.

IF YOU ARE HANDY AT CONSTRUCTING SMALL PROGRAMS, DESIGN A PROGRAM, INCORPORATING 1 and 2 TO BE PERMANENTLY ON THE DBMS DISK.

HINTS FOR USING GENERAL DBMS

1. COMPUTERIZE ONLY THOSE PORTIONS OF YOUR PAPERWORK CHORES THAT ARE MOST ROUTINELY USED OR CAUSE THE MOST PROBLEM.

2. WORK BY EXCEPTION: COMPUTERIZE ONLY THOSE PORTIONS OF THE DATA THAT ARE CAUSING THE MOST PROBLEM. CONTRARILY DO NOT ENTER EVERY CONCIEVABLE EXCEPTION IF IT WILL NOT BE REGULARILY USED.

   USE THE FOLLOWING AS A GUIDE:

   "25% OF THE STUDENTS USE
   75% OF YOUR TIME"

   ONLY USE 25% OF THE DATA YOU WANT TO STORE BECAUSE IT WILL BE USED 75% OF THE TIME.

3. KNOW YOUR LIMITS: SCALE DOWN YOUR DATA BASE. YOU ONLY HAVE SO MUCH ROOM FOR STORAGE. 2 DISKS CAN HOLD 800 - 1600 RECORDS. BEYOND 2 DISKS YOU CAN'T TELL "WHO'S ON THIRD". IF YOU CAN'T HOLD IT DOWN, THEN YOU WILL BE REQUIRING AN EXPENSIVE SYSTEM.

CERTAIN APPLICATIONS REQUIRE A NUMBER OF DBMS, LINKED TOGETHER, TO PROVIDE A LARGER INTEGRATED DATA BASED MANAGEMENT SYSTEM. THEY ARE DIFFICULT AND NOT AS ECONOMICAL TO PRODUCE. THEY ARE SPECIFIC TO A PARTICULAR NEED.

LET US LOOK AT A FEW PROBLEMS IN THIS AREA. YOU HAVE PURCHASED A GENERAL DBMS PACKAGE AND ANOTHER FOR NEGOTIATIONS (VISICALC). EACH WORKS WELL ALONE, BUT WHAT PROBLEMS AS YOU MOVE INFORMATION FROM ONE TO THE OTHER. EACH COSTS $400 FOR A TOTAL OF $800 (DON'T HOLD ME TO THE EXACT COST OF THE PROGRAM).

WOULDN'T IT BE WONDERFUL IF SOMEONE WOULD CONSTRUCT AN INTEGRATED PROGRAM THAT INCLUDED PAYROLL, PERSONNEL, VISICALC, AND BUDGET. THERE WOULD BE A COMMON DATA BASE: EACH OF THE COMPONENTS TALKING TO ONE ANOTHER: EACH DOING A PARTICULAR FUNCTION: AND YOUR ABILITY TO DO WHATEVER YOU WISHED FROM THIS PROGRAM!!! THE TIME AND ENERGY SAVINGS WOULD BE IMMENSE. BUT WHAT ABOUT THE COST.

IS A $40,000 PRICE TAG WORTH THE EFFORT? YOU BET! OVER TIME!! WILL IT SAVE TIME? YOU BET!!! WILL IT SAVE STAFF? YOU BET!!! WILL IT BE MORE ACCURATE? YOU BET!!!

NOW LET'S LOOK AT THE AREA OF SPECIAL EDUCATION. YOU CAN PURCHASE GENERAL DBMS THAT WILL DO ISOLATED FUNCTIONS. HOWEVER, OUR NEEDS ARE INTEGRATED AND OUR AUDIENCE IS LIMITED. THIS EFFECTS COST OF THE PROGRAM BUT CAN BE CAPTURED IN PERSONNEL COST (TIME).

NORMALLY AN INTEGRATED DATA BASED MANAGEMENT SYSTEM (IDBMS) IS CONSTRUCTED OF MODULES THAT ARE LINKED TOGETHER WITHIN THE PROGRAM.

The computerized Special Education Management System should be a menu oriented, data based system. The System should be designed for use by non-technical staff. The program should consist of three segments: the main segment being an all purpose data base; the second segment stores all the pertinent evaluation data for each child; the third segment is an extensive goals and objective file.

Be sure to provide yourself and staff with information which can be quickly retrieved in a variety of forms thus requiring less staff to maintain a more comprehensive data system. It eliminates going to file cabinets for single pieces of information.

The writing of I.E.P.'s, which take a substantial amount of time, become simply the selection of appropriate goals and objectives and the computer does the writing. This allows teachers more time to teach and plan. The system may be used by a clerk for processing routine or personalized letters for a student's next PPT (3 copies), etc. Planning and Placement Team (PPT) Meetings and Annual Reviews go much faster and smoother.

Those routine matters that take time from you are automatically done. It provides a list of students needing a three year evaluation; provides needed data at budget time but most of all you know that the tasks are being completed...in your office by your computer.

#1 Demographics Module: Should store the following type of information for each student. Name, birthdate, school, race, sex, living address, parents/guardians, key telephone numbers, grade, student identification number, languages, date of referral, PPT information, handicapping condition etc.

#2 Procedural Safeguards Module: Should list local administrative procedures, and action dates, which are implemented in the processing of a child into special education, through on-going evaluation and IEP update, and exit from the program. A record should also be kept of all accesses to each individual student file by name, date, and reason. Access should be at two levels minimum to protect certain information. Confidentiality should be maintained through the use of passwords and knowledge of entry procedure.

#3 Test Data Module: Accepts user input of the history of an individual child's testing including (a) area evaluated, (b) tests administered, (c) date of testing, and (d) the test administrator. Summary of testing assessments may also be included in each child's file. Actual categories are determined with local staff.

Copyright © March, 1983

#4 Observations and Assessment Module: Provides an opportunity to maintain narrative material in a child's file. Such information could include (a) summary of findings of the test data, (b) indication of the verified handicapping conditions, (c) educational and/or therapy needs, (d) anecdotal comments on behavior and performance, (e) results of psychological testing, (f) committee decisions/actions, and other information. Specific categories are finalized with local staff.

#5 IEP Management Module: Provides file space for main IEP components such as, but not limited to, (a) overall educational needs, and (b) long-term education goals. In addition, this file would allow for printing individual child's IEP format containing the following types of information: (a) summary demographics, (b) annual goals, (c) short-term objectives, and (d) column spaces for teacher to input instructional activities, evaluation methods, mastery criteria, and date mastery achieved. The actual printing format may be designed to meet local requirements for inclusion in the IEP forms package for an individual child. Actual content of the printed form may be determined with local staff.

#6 Data Sort Module: Sorts through all child files on a single disk or on several disks for specific user selected characteristics. Files can be searched for identification of particular students for single or multiple characteristics. For example, a user could search all records for students of a certain age, a certain grade, certain handicapping condition that were receiving a particular type of educational service. The Data Sort Module would identify the individual students who met all the requirements and print out their names and educational service.

#7 Report Writer Module: Allows the administrative user to prepare summary reports on the special education program. The state education agency may require periodic summary reporting of program information such as participant groupings by age, grade, and/or handicapping condition; services being provided; number of instructional hours; and much more. The Federal report for the same information may be organized differently, requires a different format, and make the report developer recompute child data differently. This part of the program should allow you to access and print any information across file.

#8 Word Processing Module: Should allow the administrative user to store and recall standard letters and documents that can be individualized for mailing. Label production should be integrated into this module.

#9 Calculation Module: Should perform all calculations of distributed data to produce summaries, etc.

Credit for some reference material found in modules to "PIE" - MEAN.

Other features may include a statistical package, an automatic test scoring package (which is an add on) and your computer can be networked with appropriate equipment.

An example of a report generated from an IDMS.

First page of a sample child (automatic portion)

NAME	TOM TINSLEY
PRESENT AGE	47 years, 10 months
SCHOOL	SHELTON HIGH SCHOOL
GRADE	12
DATE OF BIRTH	05/27/35
DATE OF REPORT	08/15/82
SEX	Male

****
* CONFIDENTIAL *
* PSYCHOEDUCATIONAL FILES *
* -SPECIAL EDUCATION- *
****

REASON FOR REFERRAL

THIS IS A NEW EVALUATION REQUESTED ON 8/ 4/74. THE PRIMARY CONCERN WAS STATED AS BEHAVIORAL. COMMUNICATION DIFFICULTY MAY BE A SECONDARY FACTOR.

REFERRAL PROCEDURE RECORD

*** ACTIONS: ***

	DATES	BY	REMARKS
REFERRAL INITIATED	8/ 4/82	4	N
PARENT PERMISSION TO EVALUATE REQUESTED	8/ 4/82	4	
RECEIVED PERMISSION TO EVALUATE	8/ 4/82	8	G
VISION SCREENING COMPLETE	8/ 4/82	8	
HEARING SCREENING COMPLETE	8/ 4/82	8	
ALL SCREENING COMPLETE	8/ 4/82	8	
EVALUATION COMPLETED	8/ 4/82	8	
DETERMINATION COMMITTEE MEETING	8/ 4/82	8	G
PARENTS INFORMED OF DECISION	8/ 4/82	8	
PARENT RESPONSE TO DECISION	8/ 4/82	8	A
I.E.P. CONSENSUS-APPROVAL			
PROGRAM IMPLEMENTATION	8/ 4/82	4	
CASE NOW ASSIGNED TO		8	

OBSERVATIONS

TEST DATA

WECHSLER INTELLIGENCE SCALE FOR CHILDREN-REVISED, GIVEN 8/ 4/79 by * 4

INFORMATION	5	PICTURE COMPLETION	16
SIMILARITIES	8	PICTURE ARRANGEMENT	14
ARITHMETIC	18	BLOCK DESIGN	18
VOCABULARY	15	OBJECT ASSEMBLY	14
COMPREHENSION	4	CODING	6
DIGIT SPAN	10	MAZES	0

VERBAL IQ= 100, PERFORMANCE IQ= 126, FULL SCALE IQ= 112

BACKGROUND/HISTORY

DISCUSSION

OVERALL LEARNING RATE ON THE WISC-R WAS IN THE HIGH AVERAGE RANGE. THERE WAS A SIGNIFICANT DIFFERENCE BETWEEN VERBAL & PERFORMANCE SCORES.

RECOMMENDATIONS

BASED ON THE HOW TOM DID ON SPECIFIC ITEMS FROM THE CABS, THE FOLLOWING INSTRUCTIONAL OBJECTIVES ARE NEXT IN THIS SPECIFIC DEVELOPMENTAL SEQUENCE:

IN THE LANGUAGE DEVELOPMENT AREA, WORK TOWARD BEING ABLE TO

1) STATE 'HOW MANY' WHEN SHOWN A NUMBER OF OBJECTS BELOW FIVE (EG.2)
2) REPEAT A SHORT SENTENCE JUST HEARD (EG. 13 SHORT WORDS)
3) NAME SOMETHING (A) TO EAT, (B) TO DRINK, (C) TO RIDE ON, (D) IS ROUND
4) IDENTIFY COLORS: (A) BLUE, (B) GREEN, (C) RED, (D) YELLOW
5) NAME 3 ANIMALS WITH 4 LEGS

IN INDEPENDENT FUNCTIONING, THE CHILD SHOULD BE ABLE TO

1) INDICATE WHICH OF 5 EATING UTENSILS PICTURED IS USED FOR SPECIFIED TASK
2) CUT OUT A BALL WITH SCISSORS AND PAPER (EG. AS BINET)
3) CUT OUT A SQUARE WITH SCISSORS AND PAPER (EG.LIKE BINET)

Copyright © March, 1983

WHAT YOU NEED TO KNOW

EACH COMPUTER APPLICATION HAS ITS OWN PARTICULAR NEEDS. A GENERAL DATA BASE IS DESIGNED TO FIT A MULTITUDE OF NEEDS AND IS INEXPENSIVE BECAUSE OF ITS WIDE DISTRIBUTION. HOWEVER SPECIFIC NEEDS ARE SACRIFICED. SPECIFIC SOFTWARE APPLICATIONS ARE MORE EXPENSIVE BECAUSE OF THEIR COMPLEXITY AND LIMITED AUDIENCE.

THE FIRST THING YOU NEED TO DO IS TO LIST YOUR PARTICULAR NEEDS. THEN LIST WHAT THE GENERAL DATA BASE WILL DO. COMPARE. IF YOU ARE SEEKING A DATA BASE FOR DEMOGRAPHIC INFORMATION THEN A GENERAL DATA BASE WILL SUFFICE. IF YOU ARE LOOKING FOR MORE COMPLEX USAGE YOU MAY HAVE TO PURCHASE SEVERAL SOFTWARE PACKAGES, I.E. GENERAL DATA BASE, CALSTAR, WORDSTAR, ETC. EACH PERFORMS A SPECIFIC FUNCTION. ALSO INHERENT IN THIS DIRECTION IS AN OVERLAP AND ISOLATION OF INFORMATION.

Copyright © March, 1983

1.0 PROGRAM CONSIDERATIONS

1.1 DOES THE DESIGN AND FORMAT OF INFORMATION PRODUCED BY THE PROGRAM MEET DISTRICT, STATE, AND/OR FEDERAL REQUIREMENTS SO THAT THE DATA WILL NOT HAVE TO BE ENTERED ONTO OTHER FORMS BY HAND?

1.2 WHAT ABOUT SECURITY?

1.3 IF THE SOFTWARE IS TO BE USED AT MULTIPLE SITES, WILL THE COMPANY SELL MULTIPLE COPIES AT A DISCOUNT?

1.4 IMPERATIVE.....MODULES MUST BE INTERACTIVE!!!

1.5 WHAT ABOUT COMPATIBLE COMPUTER SYSTEM? IF YOU HAVE A COMPUTER WILL IT RUN ON YOURS WITHOUT MODIFICATIONS?

1.6 DOES THE SYSTEM HAVE A COMPATIBLE OPERATING SYSTEM WITH YOURS? DOS, SOS, CPM

1.7 DOES PROGRAM BACK-UP DATA AUTOMATICALLY? OR????

1.8 HOW BIG IS YOUR SYSTEM? IMPLICATIONS? CAN YOU USE A MICRO? FLOPPY DISKS? HARD DISKS?

2.0 EASE IN USE AND FLEXIBILITY

2.1 IS THERE AN EASY MENU TO USE? SOME PROGRAMS REQUIRE YOU TO MASTER A COMPLEX SET OF PROGRAMMING PROCEDURES.

2.2 HOW MUCH OF THE SYSTEM IS MENU DRIVEN? TO WHAT EXTENT CAN THE USER DEFINE THE ENVIRONMENT WITHIN WHICH THE SYSTEM OPERATES?

2.3 WHAT ARE THE EDITING CAPABILITIES?

2.4 DOES IT ENABLE USER TO UPDATE RECORDS ACROSS FILE BOUNDARIES?

2.5 CAN THE FILES BE MODIFIED EASILY OR EXTENDED TO ACCEPT NEW DATA ELEMENTS?

2.6 CAN YOU CUSTOMIZE TO MEET YOUR PARTICULAR NEED WITHOUT "CODING"?

2.7 ARE THERE CATEGORIES THAT CAN BE DEFINED BY THE USER?

2.8 IS THERE EAST OF DATA ENTRY?

2.9 IS THERE EASY DATA ENTRY AND REVIEW OF THAT DATA?

2.10 ARE INPUT FIELDS WELL DEFINED AND SELF PROMPTING?

2.11 ARE INPUT ERRORS DIAGNOSED AND DESCRIBED IN AN UNDERSTANDABLE WAY?

2.12 IS THERE ERROR - TRAPPING?

2.13 WHEN THE SOFTWARE IS RUNNING, DOES IT GIVE THE USER FEEDBACK ABOUT WHAT PART OF THE PROCESSING IS TAKING PLACE?

2.14 ARE THE REPORTS THE SOFTWARE PRODUCES FORMATED IN AN EASY-TO-READ MANNER, USING APPROPRIATE ABREVIATIONS, SPACING, AND PRINT SIZE?

2.15 CAN YOU ACCESS THE SCREEN AT VARIOUS LEVELS WITHOUT ALWAYS RETURNING TO A MAIN MENU?

2.16 ARE THE SCREEN FORMATS EASY TO READ?

2.17 CAN YOU GENERATE THE REPORTS YOU WANT! LABELS? LETTERS?

2.18 WHAT IS AVERAGE RESPONSE TIME?

Copyright © March, 1983

3.0 DOCUMENTATION

3.1 WHAT ABOUT DOCUMENTATION AND SUPPORT?

3.2 IS THERE SUPPLIED DOCUMENTATION, USERS TRAINING GUIDE?
I.E.: EXAMPLES OF DATA FILES?

3.3 DO YOU RECEIVE OPERATING INSTRUCTION?

3.4 DO YOU RECEIVE MANUALS THAT ARE NON TECHNICAL ON HOW TO USE THE SYSTEM?

3.5 DO THEY PROVIDE A SYSTEM REFERENCE MANUAL?

3.6 DO THEY PROVIDE A COPY OF OPERATING SYSTEM?

3.7 DO THEY PROVIDE TECHNICAL DESCRIPTIONS OF THE PROGRAM AND AN EXPLANATION OF HOW TO ADD NEW REPORTS, TRANSACTIONS, ETC.?

3.8 DO YOU RECEIVE A DESCRIPTOR OF HOW TO SET REPORT OUTPUTS?

3.9 DO THEY TELL YOU HOW TO DEAL WITH "ERROR" MESSAGES--AND HOW TO TAKE CORRECTIVE ACTION?

Copyright © March, 1983

4.0 EVALUATION

4.1 WHAT ARE THE HARDWARE REQUIREMENTS?

4.2 WHEN ASKING ABOUT CUSTOMIZING PROGRAM, I.E. REPORTS--
DON'T ACCEPT, "IT CAN BE CUSTOMIZED." HAVE THEM SHOW YOU!

4.3 SEE THE PROGRAM "RUN".

4.4 EVIDENCE OF FIELD TESTING.

4.5 TALK WITH OTHER USERS.

4.6 READ REVIEWS.

4.7 DO NOT EVALUATE A PROGRAM IN TERMS OF ITS PRICE.

5.0 SUPPORT MAINTENANCE/AGREEMENT

5.1 WHAT IS THE COST OF THE MAINTENANCE?

5.2 WHAT ABOUT WARRANTY? WHAT ABOUT LICENSE?

5.3 HOW LONG IS THE INITIAL WARRANTY PERIOD?

5.4 DO THEY PROMISE MONEY BACK GUARANTEE?

5.5 HOW OFTEN ARE NEW RELEASES ANNOUNCED?

5.6 WHAT ENHANCEMENTS ARE CURRENTLY PLANNED?

5.7 IS THE DOCUMENTATION UPDATED WITH NEW RELEASES?

5.8 WHAT IS THE COMPANY'S BACK-UP POLICY?

5.9 WILL YOU RECEIVE THE SOURCE CODE?

Copyright © March, 1983

6.0 TRAINING

6.1 WHAT TRAINING IS AVAILABLE?

6.2 WHAT IS THE COST?

6.3 HOW LONG ARE THE TRAINING SESSIONS?

6.4 IS FOLLOW-UP TRAINING AVAILABLE?

6.5 ARE THERE WRITTEN MATERIALS AS WELL AS VERBAL AND VISUAL PRESENTATIONS?

6.6 WHOM DO YOU CALL IF YOU HAVE QUESTIONS? I.E.:: PROGRAM ENDS PREMATURELY.....

HARDWARE REQUIREMENTS

Minimum hardware requirements for a small district (300 students - 10% special education) is 1 megabyte of storage; 32K RAM; 2 disc drives; full editing capability; 1 line printer (dot matrix); Z-80 card to utilize a CP/M operating system; 1 high speed port and a video display. It is important that any system be expandable.

Practical hardware requirements for a medium district (10,000 students - 10% special education) is 2 megabytes of storage; 48K RAM; 3 disc drives; full editing capability; 1 line printer (dot matrix); Z-80 micro processor and capable of accepting a Z-80 card to utilize CP/M operating system; high speed port(s) and video display.

SUMMARY

SO YOU'RE LOOKING TO ENTER THE COMPUTER ERA!!!

BE KNOWLEDGABLE; BE CAUTIOUS.

1. A tremendous amount of time is needed to establish the information for the original data base.

   Are you willing to make the effort?

Copyright © March, 1983

Summary Continued:

2. Initially it will force a tremendous amount of planning, organization and coordination! i.e.....development of data sheets to gather information, etc.
3. It is essential that you update (upkeep) your files. Do you have the resources?
4. It will force decisions! i.e....."Is the information worth the space it takes up?

END

Thomas E. Tinsley Jr.
Copyright © March, 19

SELECTED REFERENCES AND RESOURCES

EDUCATION TURNKEY SYSTEMS, INC.
1030 15th Street, N.W.
Suite 800
Washington, D.C. 20005

EDUCATIONAL COMPUTER MAGAZINE
Educational Computer
Post Office Box 535
Cupertino, Ca. 95015

MEAN BRIEF
Micro Computer Education Application Network
Suite 800
1030 15th Street, N.W.
Washington, D.C. 20005

ORT
Organization for Rehabilitation through Training
Ort House Sumpter Close
Finchley Road
London, NW3, 5HR

CLASSROOM COMPUTER NEWS
International Educators Inc.
51 Spring Street
Watertown, Mass. 02172

ELECTRONIC LEARNING
2280 Arbor Blvd.
Dayton, Ohio 45439

NUMERICAL ASSOCIATES
976 W. Foothill Blvd.
Suite 203
Claremont, CA. 91711